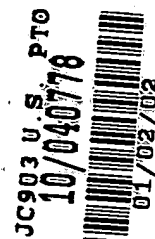


APPLICATION FOR U.S. PATENT



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**COMPOSITION FOR TIRE SIDEWALLS
AND OTHER RUBBER CONSTRUCTIONS****Inventors: Kenneth O. McElrath, Mun Fu Tse, and Andrew L. Tisler**

10 The present application is a Divisional Application of U.S.S.N. 09/071,105,
filed on May 1, 1998, which claims priority to Provisional Applications U.S.S.N.
60/045,632 filed May 5, 1997, and U.S.S.N. 60/062,591 filed October 20, 1997

FIELD OF THE INVENTION

15 The present invention relates to compositions for making tire sidewalls and
other rubber constructions which exhibit improved ozone resistance and fatigue
crack propagation resistance, as well as a reduction in staining and discoloration.
The composition comprises a blend of halogenated copolymer of isoolefin and
para-alkylstyrene of relatively high aromatic comonomer content and relatively low
halogen content with general purpose rubbers (GPR) such as butadiene rubber
20 (BR), natural rubber (NR) and/or isoprene rubber (IR). The tire sidewall may
comprise a single layer or a veneer construction wherein an outer layer comprises
the blend of the halogenated copolymer with one or more general purpose rubbers,
and an inner layer can comprise a blend of general purpose rubbers.

25 **BACKGROUND OF THE INVENTION**

Rubber tires, such as pneumatic tires, include many components, such as,
for example, sidewalls. Sidewalls are continuously subjected to distortion under
normal road operating conditions. The sidewalls are subjected to extensive
continuous flexing and can crack under such conditions. In addition to flex
30 cracking, sidewalls are also subjected to atmospheric chemical action such as
ozone attack. The overall effect is that the sidewalls may erode and degrade. The
sidewall may even separate from the tire carcass during use, leading to tire failure.